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PATENT APPLICATION
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IN THE UNITED STATES PATENT AND TRADEMARK

In re application of

Yorimasa SUWA, et al.

Appln. No. 10/048,964

Group Art Unit: 1614

Confirmation No.: 5994

Examiner: Not Yet Assigned

Filed: February 5, 2002

For: NEUROPATHY THERAPEUTIC AGENT

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.97 and 1.98**

Commissioner for Patents
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) (substitute for PTO Form 1449) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date for an application other than a continued prosecution application (CPA) under §1.53(d); (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after filing a

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U.S. Appln. No. 10/048,964

request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

Masaaki SUZUKI, et al. "15-Deoxy-16-(m-tolyl)-17, 18, 19, 20-tetranorisocarcabacyclin: a simple TIC derivative with potent anti-apototic activity for neuronal cells" and Masaaki SUZUKI, et al., "(15R)-16-m-tolyl-17, 18, 19, 20- tetranorisocarcabacyclin: A stable ligand with high binding affinity and selectivity for a prostacyclin receptor in the central nervous system" were disclosed in the International Search Report submitted on February 5, 2002. For the Examiner's convenience copies are attached.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant submits the following explanations:

Jpn Pharmacol Ther, "The Neurite Outgrowth Action of Prostaglandins in Neuronal Cells", is disclosed in the specification at page 5, line 35.

Bulletin of the Japanese Neurochemical Society, "Cell differentiation action of prostaglandin D₂ to neuromatous cells", is disclosed in the specification at page 5, line 34.

An English translation of the relevant part of Masaaki SUZUKI, et al., "Design of Prostaglandins with High Binding Affinity and Selectivity for a IP₂ Receptor in the Central Nervous System and their Biological Activity" is attached.

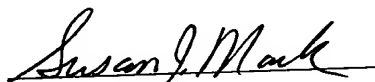
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The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Respectfully submitted,

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Substitute for Form 1449 A & B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number 10/048,964
 Confirmation Number 5994
 Filing Date February 05, 2001
 First Named Inventor Yorimasa SUWA
 Art Unit 1614
 Examiner Name Not Yet Assigned
 Attorney Docket Number Q68284

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		Toshiya MINAGAWA, et al., "Blood-brain-barrier Transport of Lipid Microspheres Containing Clinprost, a Prostaglandin I ₂ Analogue", J. Pharm. Pharmacol, 1996, 48: pp. 1016-1022.	
		Yumiko WATANABE, et al., "A Novel Subtype of Prostacyclin Receptor in the Central Nervous System", Journal of Neurochemistry, 1999, Vol. 72, No. 6, pp.2583-2592.	
		K. MATSUMURA, et al., "Prostacyclin Receptor in the Brain and Central Terminals of the Primary Sensory Neurons: An Autoradiographic Study Using a Stable Prostacyclin Analogue [³ H]iloprost", 1995, Neuroscience Vol. 65, No. 2, pp. 493-503.	
		Akinori AKAIKE, et al., "Prostaglandin E ₂ protects cultured cortical neurons against N-methyl-D-aspartate receptor-mediated glutamate cytotoxicity", 1994, Brain Research, 663, pp. 237-243.	
		Chantal CAZEVIEILLE, et al., Prostacyclin (PGI ₂) protects rat cortical neurons in culture against hypoxia/reoxygenation and glutamate-induced injury", 1993, Neuroscience Letters, 160, pp. 106-108.	
		Seiji MATSUDA, et al., "Protective effect of a prostaglandin I ₂ analog, TEI-7165, on ischemic neuronal damage in gerbils", 1997, Brain Research 769, pp. 321-328.	
		Robert F. NEWTON, et al., "Strategies Employed in the Synthesis of Prostacyclins and Thromboxanes", Reviews, pp. 449-478.	
		Jpn Pharmacol Ther, "The Neurite Outgrowth Action of Prostaglandins in Neuronal Cells", 1993, Vol. 21, No. 1, pp. 37-39.	no
		Bulletin of the Japanese Neurochemical Society, "Cell differentiation action of prostaglandin D ₂ to neuromatous cells", 1985, Vol. 24, pp. 376-379.	No
		Peter J. LEWIS, et al., "Clinical Pharmacology of Prostacyclin", p. v.	
		A. NITTA, et al., β -Amyloid protein-induced Alzheimer's disease animal model", 1994, Neuroscience Letters 170, pp. 63-66.	
		Masaaki SUZUKI, et al. "15-Deoxy-16-(m-tolyl)-17, 18, 19, 20-tetranorisocarbacyclin: a simple TIC derivative with potent anti-apototic activity for neuronal cells", Chemical Communications. (Cambridge), 1999, 4, pp. 307-308.	
		Masaaki SUZUKI, et al., "(15R)-16-m-tolyl-17, 18, 19, 20- tetranorisocarbacyclin: A stable ligand with high binding affinity and selectivity for a prostacyclin receptor in the central nervous system", Agnew, Chem. Int. Ed. Engl. 1996, 35, No. 3, pp. 334-336	
		Masaaki SUZUKI, et al., "Design of Prostaglandins with High Binding Affinity and Selectivity for a IP2 Receptor in the Central Nervous System and their Biological Activity", 40 th Symposium on the Chemistry of Natural Products", 1998 (Fukuoka), pp. 145-150.	Partial
Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.